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10/672,938	09/26/2003	Tushad P. Driver	066243-0173 (1322581T)	9505
7590		04/16/2007	EXAMINER	
JOSEPH D. KUBORN			CHU, DAVID H	
ANDRUS, SCEALES, STARKE & SAWALL			ART UNIT	PAPER NUMBER
100 EAST WISCONSIN AVENUE				2628
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SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/672,938	DRIVER ET AL.
	Examiner	Art Unit
	David H. Chu	2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 January 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 25-42 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 42 is/are allowed.
 6) Claim(s) 25-38, 40 and 41 is/are rejected.
 7) Claim(s) 39 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Acknowledgment is made of the amendment filed by the applicant on 10/672/938, in which:

- Independent claims 25 and 35 were amended
- Claims 1-24 were canceled
- New claim 42 was added

2. Claims 25-42 are currently pending in U.S. Application Serial No. 10/672938 and an Office Action on the merits follows.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 25-34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. The claim recites a computer program per se. Computer programs per se, not stored on a computer readable medium, are abstract ideas. Computer programs per se are not capable of performing any function (See MPEP 2106).

It is suggested that the preamble be amended to recite, "A medical imaging workstation having stored thereon a software program product that is executed by a computer, the software components comprising:"

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 25-33, 35-37 and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (PGPUB Document No. US 2002/0039084) in view of Butler et al. (U.S. Patent No. 6573913).**

8. Note with respect to claim 25,

9. Yamaguchi teaches:

A medical image display system using a display area having,

- **A first display of a first resolution and a second display of a second resolution different than the first resolution**

[Yamaguchi, 0054]

10. However, Yamaguchi does not expressly teach:

- An allocation protocol adapted to move a graphical element being displayed on a first display with a first resolution to a second display with a second resolution that is different than the first resolution

- A data scrolling portion that dynamically scales a moved graphical element such that when the graphical element is moved the graphical element appears unchanged

11. Butler et al. teaches:

- An allocation protocol adapted to move a graphical element being displayed on a first display with a first resolution to a second display with a second resolution that is different than the first resolution

[The displays of FIG. 11(a) are clearly of different resolution]

(Butler et al., FIG. 11(a))

- A data scrolling portion that **dynamically scales a moved graphical element** such that when the graphical element is moved the graphical element appears **unchanged**

[The window that pans across the two displays of different resolution is scaled so as to appear unchanged when moved]

(Butler et al., FIG. 11(a))

12. Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to apply the **dynamically scaling teaching of Butler** to the **medical image system of Yamaguchi**, because **this enables the user with a GUI that behaves and responds in a predictable manner even if the GUI spans multiple monitor spaces** (Butler et al., col. 3, line 30-36).

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13. Note with respect to claim 26,
14. The combined teaching of Yamaguchi and Butler et al. teaches:
The software program of claim 25,
 - Wherein dynamically scaling the moved graphical element comprises
changing a number of pixels used to display the graphical element
[as discussed above exchanging maximized full screen images to a display of different resolution, results in changing a number of pixels used to display the graphical element, as recited by applicant]
15. Note with respect to claim 27,
16. The combined teaching of Yamaguchi and Butler et al. teaches:
The software program of claim 26,
 - Wherein a **scaling factor** [*the scaling factor is the ratio of the difference in resolutions of the displays, wherein the image is being exchanged*] is used to determine the
number of pixels used to display the image on the second display [*when displaying a full screen/maximized image on the displays the images are being exchanged, the ratio above is used in determining the number of pixels used to display the image*]
17. Note with respect to claim 28,
18. The combined teaching of Yamaguchi and Butler et al. teaches:
The software program of claim 27,

- Wherein the moved graphical element is plotted in a **virtual space** [*any medical image, such as an X-ray and MRI, presented on a display is a virtual representation on a virtual space*], and the **scaling factor is based on the plot of the graphical element** [*the exchanged images for view on different displays are clearly plotted based on the scaling factor as discussed above*]

19. Note with respect to claim 29,

20. The combined teaching of Yamaguchi and Butler et al. teaches:

The software program of claim 25, further comprising:

- A display protocol that allows a high resolution display to display a graphical element in **high resolution** [1600x1200] [Yamaguchi, 0052]
- A color display to display a graphical element in a resolution appropriate for the **color display** at a same time [Yamaguchi, 0057]

21. Note with respect to claim 30,

22. The combined teaching of Yamaguchi and Butler et al. teaches:

The software protocol of claim 25,

- Wherein the allocation protocol is adapted to **allow a graphical element to be dragged from the first display to the second display** [*the controller 20, discussed above, exchanging images from one display to another is the equivalent to dragging an image on one display onto another*]

23. Note with respect to claim 31,
24. The combined teaching of Yamaguchi and Butler et al. teaches:
The software program of claim 25, further comprising:
 - A **hardware identification protocol** [controller 20] that is configured to identify a type of display connected to the workstation for which the software program is operating,
 - i. Wherein the allocation protocol **allocates graphical elements to be displayed based on the type of display identified by the hardware identification protocol** [controller determines whether the data should be displayed on a color or monochrome display]
[Yamaguchi, 0062] [Yamaguchi, 0045]
25. Note with respect to claim 32,
26. The combined teaching of Yamaguchi and Butler et al. teaches:
The software program of claim 31, further comprising:
 - A **network communication manager** [controller 20 connected to a network in a medical facility] configured to facilitate a transfer of a medical image, acquired by a medical imaging device, from a storage device located on a network
[Yamaguchi, 0040]
27. Note with respect to claim 33, claim 33 is similar in scope to the claim 29, thus the rejections to claim 29 hereinabove are also applicable to claim 33.

28. Note with respect to claim 35, claim 35 is similar in scope to the claim 1, thus the rejections to claim 1 hereinabove are also applicable to claim 35.
29. Note further, the controller of a personal computer as discussed above is the equivalent to the **processing circuit**, as recited by applicant.
30. And further, Yamaguchi teaches displaying **medical images** [Yamaguchi, 0036]
31. Note with respect to claim 36, claim 36 is similar in scope to the claim 33, thus the rejections to claim 33 hereinabove are also applicable to claim 36.
32. Note with respect to claim 37,
33. The combined teaching of Yamaguchi and Butler et al. teaches:
The system of claim 35,
 - Wherein the processing circuit is further configured to **allocate medical images based on a type of monitor for which the medical images are best suited** [Yamaguchi, 0045] [Yamaguchi, 0062] [Yamaguchi, 0060]
34. Note with respect to claim 40, claim 40 is similar in scope to the claim 26, thus the rejections to claim 26 hereinabove are also applicable to claim 40.

35. Note with respect to claim 41,
36. The combined teaching of Yamaguchi and Butler et al. teaches:
The system of claim 35,
 - Wherein the processing circuit is further configured to allocate a graphical element to a high resolution display or a low resolution display
[Yamaguchi, 0055]
 - A different number of pixels would be used to display the graphical element on the high resolution display than the low resolution display
[as discussed above, exchanging images from one resolution display to a different resolution display result in displaying the image with a different number of pixels]
37. Note with respect to claim 34,
38. Yamaguchi teaches:
 - Using displays of different resolutions
[Yamaguchi, 0052-0054] (Yamaguchi, Fig. 3)
 - Combination of color and monochrome displays
[Yamaguchi, 0057]
 - Selecting the appropriate display for displaying an image
[Yamaguchi, 0045]

39. However, Yamaguchi does not expressly teach:

The software program of claim 33, further comprising:

- A display protocol that allows a high resolution display to display a graphical element on a display having more pixels vertically than horizontally
- A second display to display a graphical element on a display having more pixels horizontally than vertically at a same time

40. Butler et al. teaches:

The software program of claim 33, further comprising:

- A display protocol that allows a high resolution display to display a graphical element on a display having more pixels vertically than horizontally
- A second display to display a graphical element on a display having more pixels horizontally than vertically at a same time

[Fig. 11(a) and Fig. 13(b) of Butler et al. clearly shows how a graphical element is being displayed on two monitors of different aspect ration at the same time]

41. Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to apply the *horizontally longer aspect ratio display and vertically longer aspect ratio display simultaneously displaying a graphical element teaching of Butler et al.* to the *plural medical display system of Yamaguchi*, because *this enable efficient viewing of images of different aspect ratios.*

42. **Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi as applied to claims 1-6, 25-33, 35-37 and 40-41 above, and further in view of the applicant's admitted prior art in the specification [0054].**

43. Note with respect to claim 38,

44. Yamaguchi teaches:

- Allocating a high resolution image to a high resolution display
- Allocating a color image to a color display

[refer to claim rejection above with respect to claim 29]

45. However, Yamaguchi does not expressly teach:

- Medical images in a stack synch

46. The applicant's admitted prior art teaches:

- A stack sync is generally used for volumetric set of images that, when viewed in sequence, give a better understanding of subject of interest.

47. Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to allocate high resolution images in a stack synch to a high resolution display and allocate color images in a stack synch to a color display, because this allows a better understand of subject of interest.

Allowable Subject Matter

48. Claim 39 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
49. Claim 42 is allowed.

Response to Arguments

50. Applicant's arguments filed 1/10/2007 have been fully considered but they are not persuasive.

51. Following are the applicant's arguments and examiner's response.

52. The applicant argues:

- Reference Yamaguchi and Butler do not teach the recited "moving" of a graphical element from a first display to a second display, wherein "moving" refers to moving in real time; not storing and then later opening the data on a different workstation

[Butler teaches, a window that pans across the two displays of different resolution is scaled so as to appear unchanged when moved]

(Butler et al., FIG. 11(a))

Conclusion

53. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Chu whose telephone number is (571) 272-8079. The examiner can normally be reached on M-TH 9:00am - 7:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark k. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DHC



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